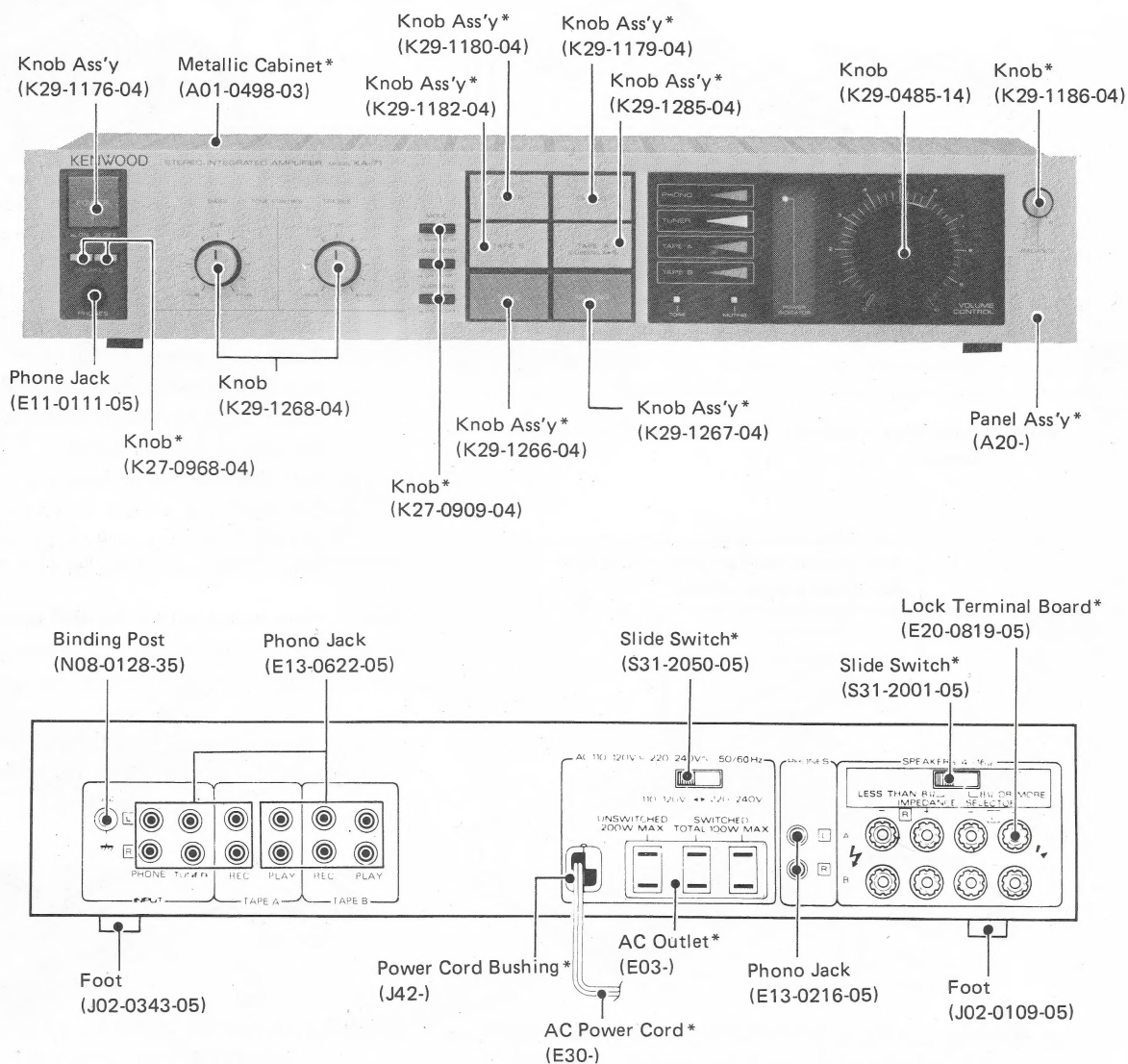


## KENWOOD

# KA-31/51/71 KA-31B/51B

### STEREO INTEGRATED AMPLIFIER



#### NOTE:

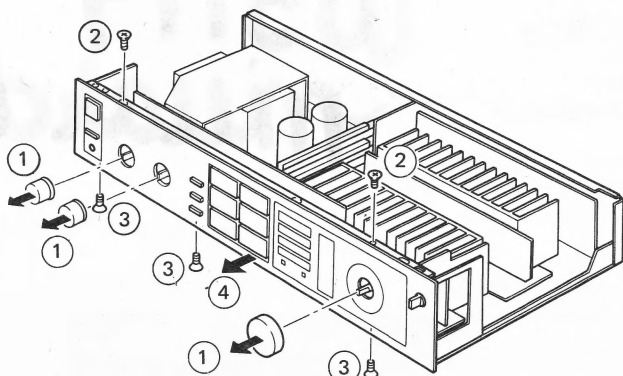
To avoid electrical shock and/or unit damage don't touch the heat sink as heat sink has power supply voltage.

\* Refer to Part List on Page 9.  
Photo is KA-71.

# DISASSEMBLY FOR REPAIR

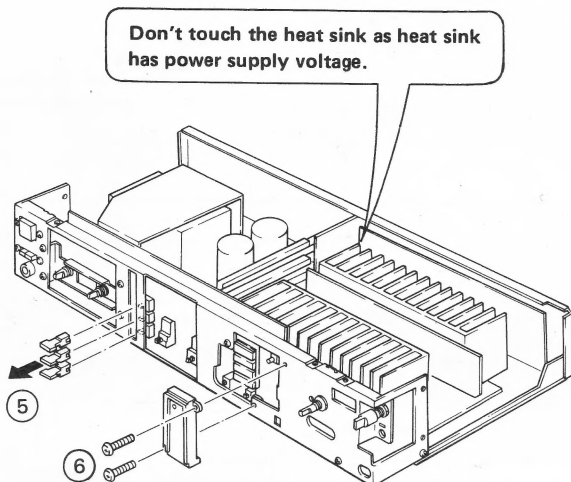
## DISASSEMBLY FOR REPAIR

- A. 1. Pull volume knob and tone control knobs frontward ( ① ).
2. Remove 2 flat head screws ( ② ) at the top side and 3 flat head screws ( ③ ) at the bottom side of the front panel and pull the front panel frontward ( ④ ).



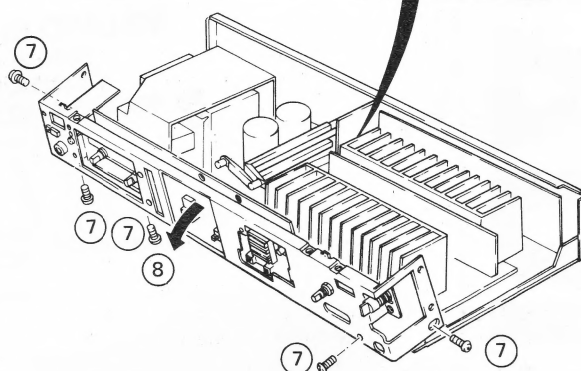
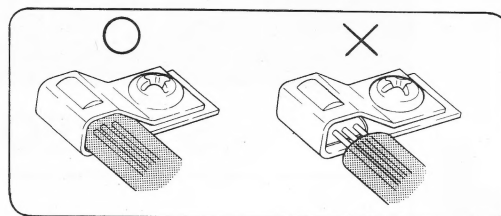
- B. 3. Pull 3 knobs (MODE, LOUDNESS and SUBSONIC) out ( ⑤ ).
4. Remove 2 screws ( ⑥ ) retaining the POWER LED escutcheon and remove the POWER LED escutcheon.

**Note:** Only these 2 screws ( ⑥ ) are longer than the other Br-tap screws.



- C. 5. Remove 5 screws ( ⑦ ) from the sub panel to make the sub panel free from the chassis.
6. Tilt the sub panel frontward in the direction of the arrow ( ⑧ ) to let the EXTENSION shaft to be free.

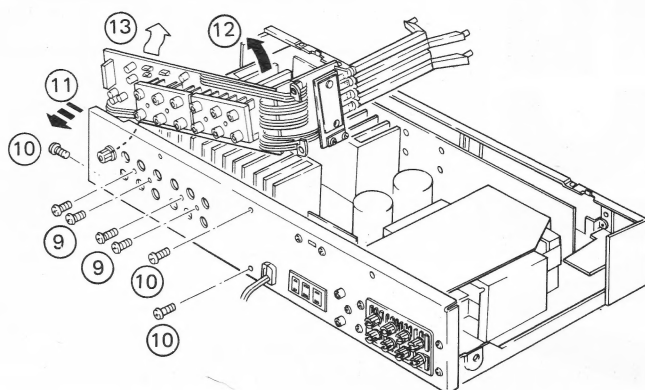
**Note:** The thermo-compensation transistor Q9 and Q10 on POWER AMP pc board (X07-2020-A/4) is located on the top of the heat sink. When replacing, be careful so that the transistor leads do not touch to the transistor mounting hardware and be sure to cover the leads by vinyl cover (KA-31 and KA-51).



To remove the TONE CONTROL pc board, skip to 9.

- D. 7. Remove 4 screws ( ⑨ ) retaining INPUT phono jack, 2 screws retaining INPUT SELECTOR pc board (X11-1870-B/6) and the screw ( ⑩ ) on the left side of the rear panel.
8. Pull the rear panel gently ( ⑪ ) and pull the EQ AMP pc board (X11-1870-C/6) and INPUT SELECTOR pc board (X11-1870-B/6) up together in the direction of the arrow ( ⑫ & ⑬ ).

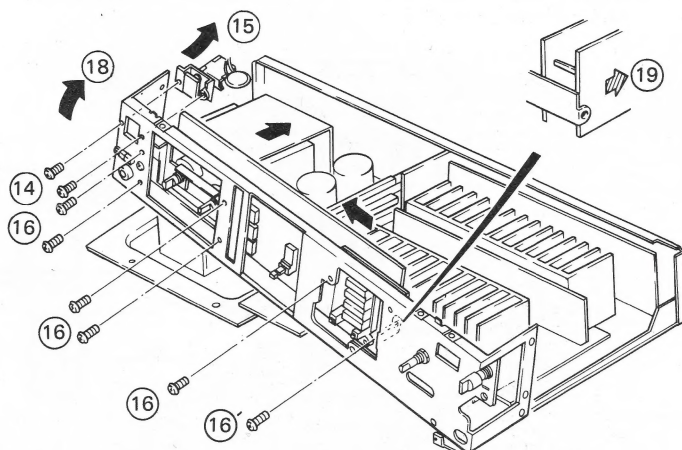
**Note:** When pulling out the EQ AMP pc board, be careful of GND lead.





# DISASSEMBLY FOR REPAIR / ADJUSTMENT / REGLAGES / ABGLEICH

- E. 9. Remove 2 screws ( 14 ) retaining the power switch mounting hardware and pull the POWER switch out in the direction of the arrow ( 15 ).
10. Remove 6 screws ( 16 ) retaining the TONE CONTROL pc board (X11-1870-A/6). One of the screw ( 16' ) is located behind of LED pc board (X11-1870-D/6), then remove it through the round cutting in LED pc board.
11. Pull the left side of the sub panel up a little and remove the left side of TONE CONTROL pc board (X11-1870-A/6) backward ( 17 ) until it is freed from the sub panel in the direction of the arrow ( 18 ).
12. Slide the TONE CONTROL pc board to the left to free from pc board mounting arm ( 19 ).



**Note:** When pulling the TONE CONTROL pc board, be careful of TEST terminal on the pc board not to scratch the LED pc board. To prevent this, LED pc board should be removed with TONE CONTROL pc board.

## ADJUSTMENT

### IDLE CURRENT ADJUSTMENT (BIAS CURRENT ADJUSTMENT)

1. Turn the volume knob fully counterclockwise.
2. Connect a DC voltmeter to both pins of R35 (R36) of the power amp pc board (X07-2010-B/4). (See the figure A).
3. Turn the power on and wait 5 minutes.
4. Adjust VR1 (VR2) so that the DC voltmeter reads 10 ~ 15 mV.

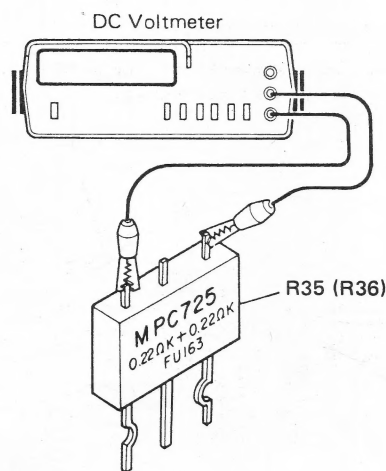


Fig. A

### BLINDSTROMEINSTELLUNG (SIGNALLOSER ZUSTAND) (VORSPANNUNGSSTROM-EINSTELLUNG)

1. Den Lautstärksteller ganz nach links drehen.
2. Einen Gleichspannungsmesser an beide Stifte von R35 (R36) des Audiogerätes (X07-2010-B/4) anschließen. (Siehe Zeichnung A)
3. Die Stromversorgung einschalten und 5 Minuten warten.
4. VR1 (VR2) so einstellen, daß der Gleichstrommesser 10 ~ 15 mV anzeigt.

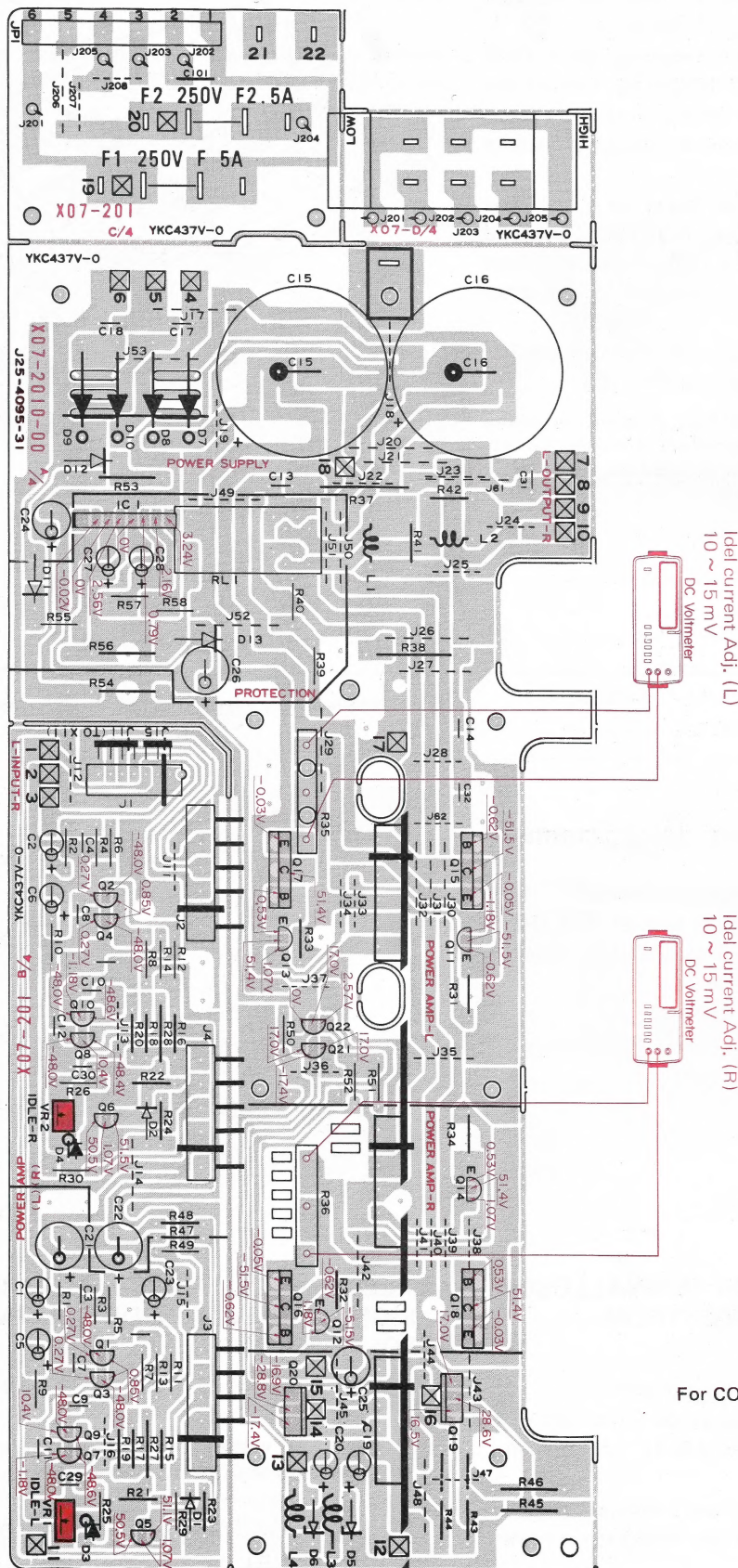
### REGLAGE DU COURANT LIBRE (SANS SIGNAL) (REGLAGE DU COURANT DE POLARISATION)

1. Tourner le réglage du volume à fond de course vers la gauche.
2. Relier un voltmètre pour courant continu aux deux broches du R35 (R36) de l'appareil audio (X07-2010-B/4). (Se reporter à l'illustration A)
3. Mettre le circuit sous tension et attendre cinq minutes.
4. Régler le VR1 (VR2) de façon que le voltmètre indique 10 à 15 mV.



## PC BOARD (KA-71)

POWER AMP (X07-2010-11) Component side view



In this model, there are separated pc boards which was originally one. These separated pc boards can't be shipped independently.

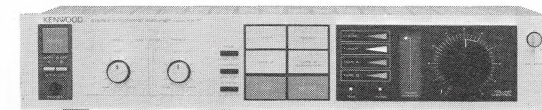
ex. Part No. of pc board	Separated portion no.
X09-1230-00	(A/3)
X09-1230-00	(B/3)
X09-1230-00	(C/3)

In the example shown above, separated portion can't be ordered independently. In case only A/3 was ordered, pc board ass'y of X09-1230-00, which all A/3, B/3, C/3 included, will be shipped.

For CONTROL PCB & SUB PCB see page 7.

Refer to the schematic diagram for the values of resistor and capacitors. The PC board drawing is viewing from the side easy to check.





## SPECIFICATION

### Audio Section

Power Output  
65 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.05% total harmonic distortion.

Both Channels Driven at 8 ohms,  
1 kHz.....68 W + 68 W

Dynamic Power Output at  
4 ohms.....320 W

Total Harmonic Distortion  
AUX input to SPEAKER output  
(20 Hz to 20,000 Hz).....0.05% at rated power  
into 8 ohms  
(20 Hz to 20,000 Hz).....0.03% at 1/2 rated power  
into 8 ohms

PHONO input to SPEAKER  
output (1 kHz).....0.025% at rated power with  
VOLUME -20 dB

Intermodulation Distortion.....0.05% at rated power  
(60 Hz:7 kHz = 4:1) into 8 ohms

Damping Factor.....25 (1 kHz into 8 ohms)

Power Bandwidth.....10 Hz to 100 kHz  
at 0.2% T.H.D.

Frequency Response.....10 Hz to 100 kHz,  
+0 dB, -3 dB

Input Sensitivity/Impedance  
Phono.....2.5 mV/50 k ohms

Tuner, Tape.....150 mV/25 k ohms

Signal-to-Noise Ratio (IHF, A)  
Phono.....74 dB for 2.5 mV input  
80 dB for 5.0 mV input

Tuner, Tape.....100 dB for 150 mV input

Phono Maximum Input Level.....110 mV (RMS),  
T.H.D. 0.05% at 1,000 Hz

Output Level/Impedance  
Tape REC (Pin).....150 mV/2 k ohms

Phono Frequency Response.....RIAA standard curve  $\pm 0.5$  dB  
(20 Hz to 20,000 Hz)

Tone Control  
Bass..... $\pm 10$  dB at 100 Hz

Treble..... $\pm 10$  dB at 10 kHz

Subsonic Filter.....18 Hz, 6 dB/oct

Loudness Control.....+10 dB at 100 Hz  
(at -30 dB VOLUME Level)

### General

Power Requirements.....60 Hz 120 V (U.S.A. & Canada  
model), 50 Hz 240 V (U.K. model)  
or 50/60 Hz 110 - 120 V/  
220 - 240 V, switchable

Power Consumption.....2.5 A (JUL and CSA)  
270 W  
(8 ohms at rated power)

A.C. Outlet.....Switched 2, Unswitched 1  
20 W (No signal)

Dimensions.....W 440 mm (17-5/16")  
H 87 mm (4-19/64")  
D 236 mm (9-51/64")

Weight.....6.7 kg (14.8 lb)

\* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

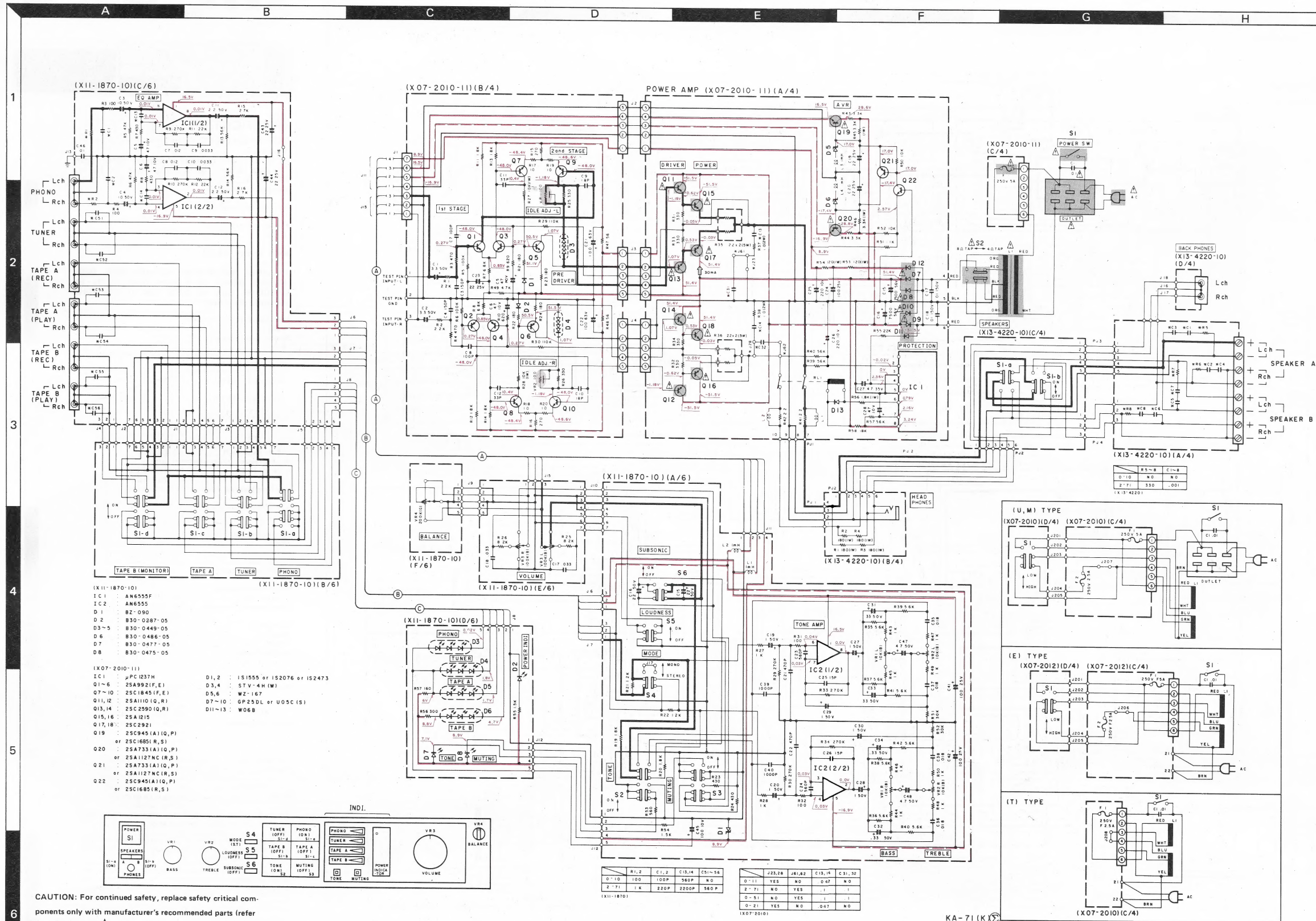
Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

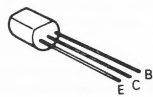
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanden die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

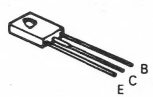


CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

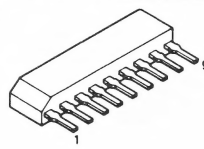
2SA733(A)  
2SA992  
2SA1127NC  
2SC945(A)  
2SC1685  
2SC1845



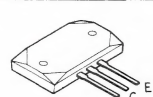
2SA1110  
2SC2590



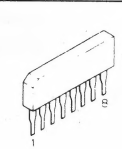
AN6555F  
AN6555



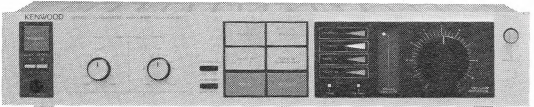
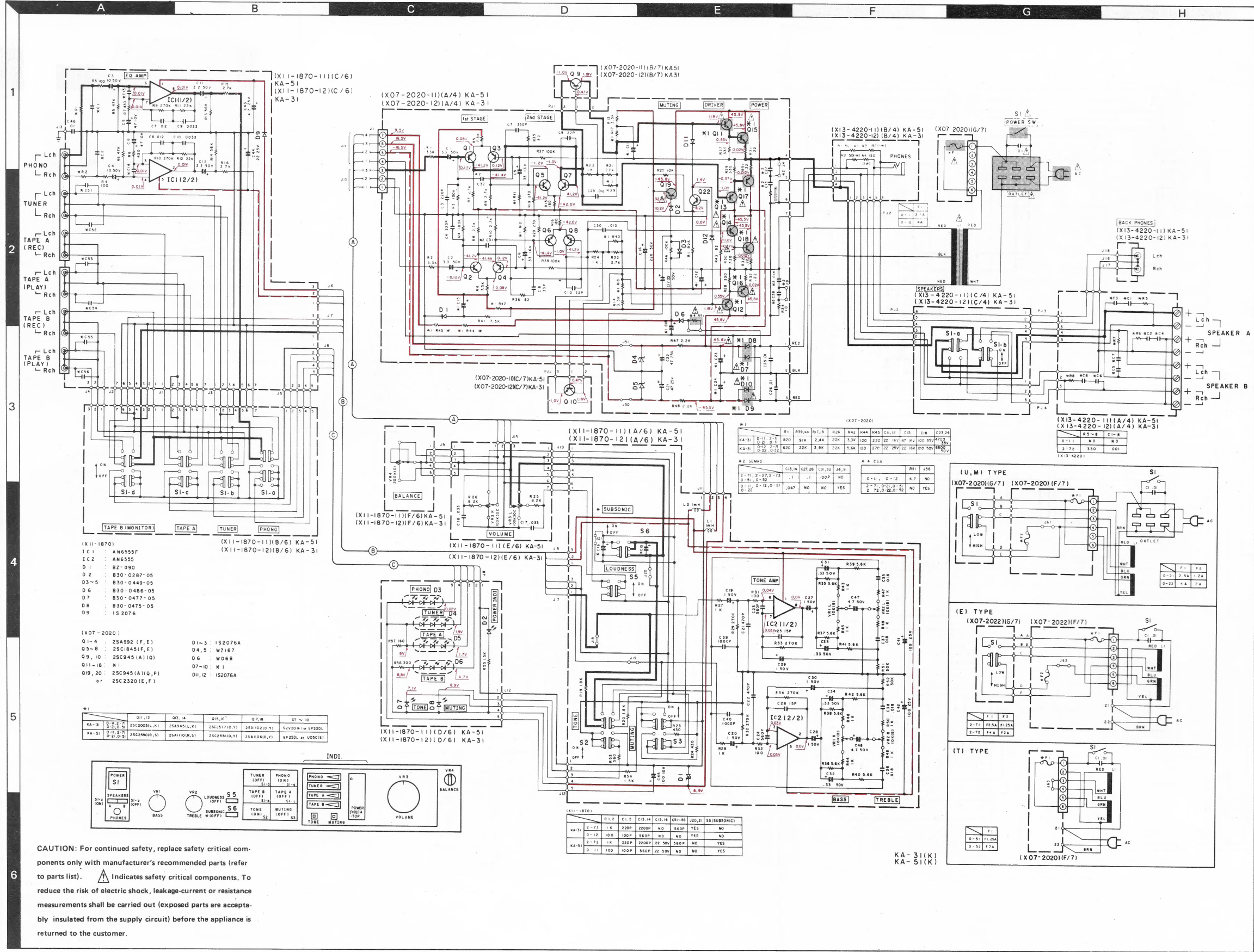
2SA1215  
2SC2921



μPC1237H







**SPECIFICATION**

**Audio Section (KA-51)**  
Power Output  
50 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion.

Both Channels Driven at 8 ohms,  
1 kHz.....53 W + 53 W  
Dynamic Power Output at  
4 ohms.....250 W

**Audio Section (KA-31)**  
Power Output  
30 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion.

Both Channels Driven at 8 ohms,  
1 kHz.....32 W + 32 W  
Dynamic Power Output at  
4 ohms.....150 W

**Total Harmonic Distortion**  
AUX input to SPEAKER output  
(20 Hz to 20,000 Hz).....0.09% at rated power into 8 ohms  
(20 Hz to 20,000 Hz).....0.05% at 1/2 rated power into 8 ohms

**PHONO input to SPEAKER**  
output (1 kHz).....0.04% at rated power with VOLUME -20 dB

**Intermodulation Distortion**.....0.05% at rated power (60 Hz:7 kHz = 4:1) into 8 ohms

**Damping Factor**.....25 (1 kHz into 8 ohms)

**Power Bandwidth**.....10 Hz to 100 kHz at 0.2% T.H.D.

**Frequency Response**.....10 Hz to 100 kHz, +0 dB, -3 dB

**Input Sensitivity/Impedance**  
Phono.....2.5 mV/50 k ohms

**Tuner, Tape**.....150 mV/25 k ohms

**Signal-to-Noise Ratio (IHF, A)**  
Phono.....74 dB for 2.5 mV input  
80 dB for 5.0 mV input

**Tuner, Tape**.....100 dB for 150 mV input

**Phono Maximum Input Level**.....110 mV (RMS), T.H.D. 0.05% at 1,000 Hz

**Output Level/Impedance**  
Tape REC (Pin).....150 mV/2.7 k ohms

**Phono Frequency Response**.....RIAA standard curve  $\pm 0.5$  dB (20 Hz to 20,000 Hz)

**Tone Control**  
Bass..... $\pm 10$  dB at 100 Hz

**Treble**..... $\pm 10$  dB at 10 kHz

**Loudness Control**.....+9 dB at 100 Hz (at -30 dB VOLUME Level)

**General**

**Power Requirements**.....60 Hz 120 V (U.S.A. & Canada model), 50 Hz 240 V (U.K. model) or 50/60 Hz 110 - 120 V

**Power Consumption**.....110 W (UL and CSA) 140 W (8 ohms at rated power) 13 W (No signal)

**A.C. Outlet**.....Switched 2, Unswitched 1

**Dimensions**.....W 440 mm (17-5/16") H 87 mm (4-19/64") D 236 mm (9-5/16")

**Weight**.....6.1 kg (13.5 lb) (KA-51) 4.7 kg (10.4 lb) (KA-31)

\* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

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Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

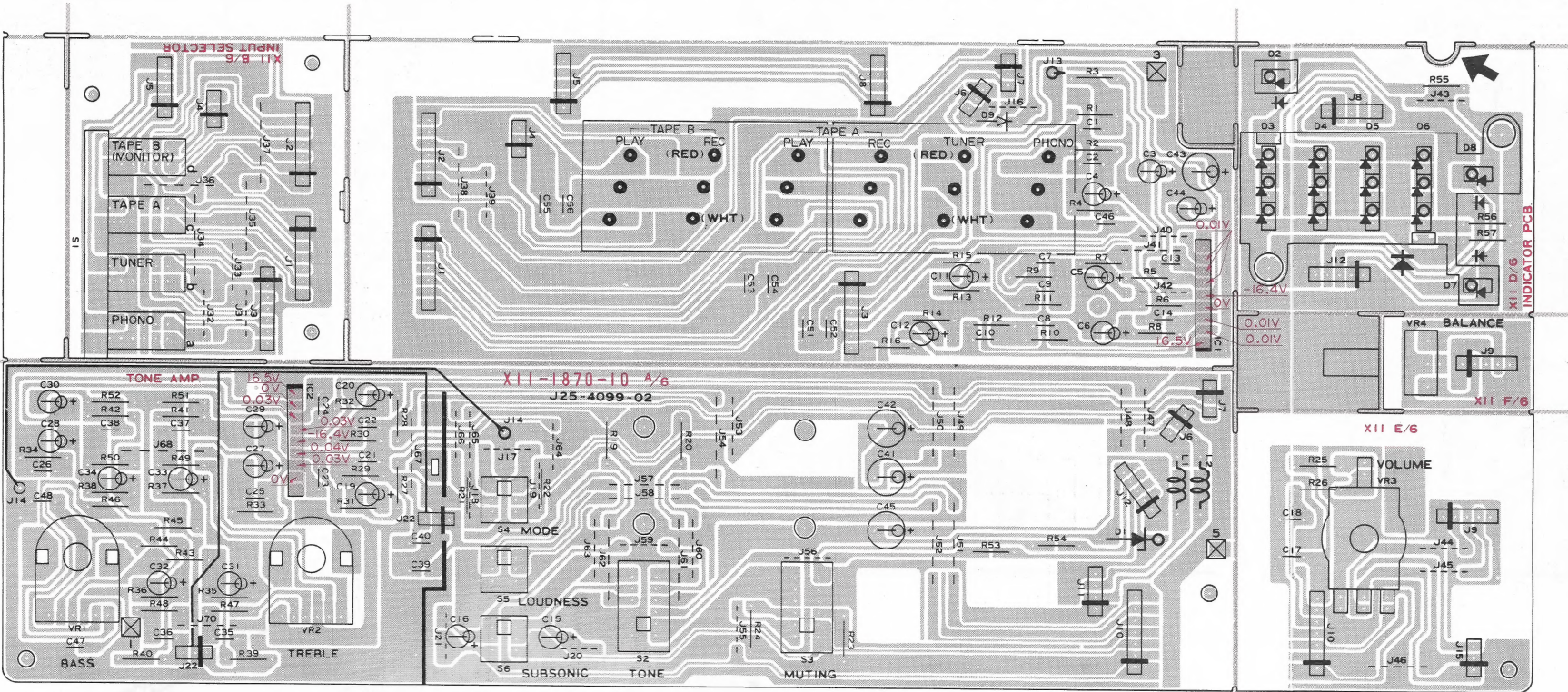
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanden die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

- |           |         |         |         |         |
|-----------|---------|---------|---------|---------|
| 2SA954    | 2SC2003 | 2SA1110 | 2SA1102 | AN6555F |
| 2SA992    | 2SC2320 | 2SC2590 | 2SA1106 | AN6555  |
| 2SA945(A) |         |         | 2SC2577 |         |
| 2SC1845   |         |         | 2SC2581 |         |

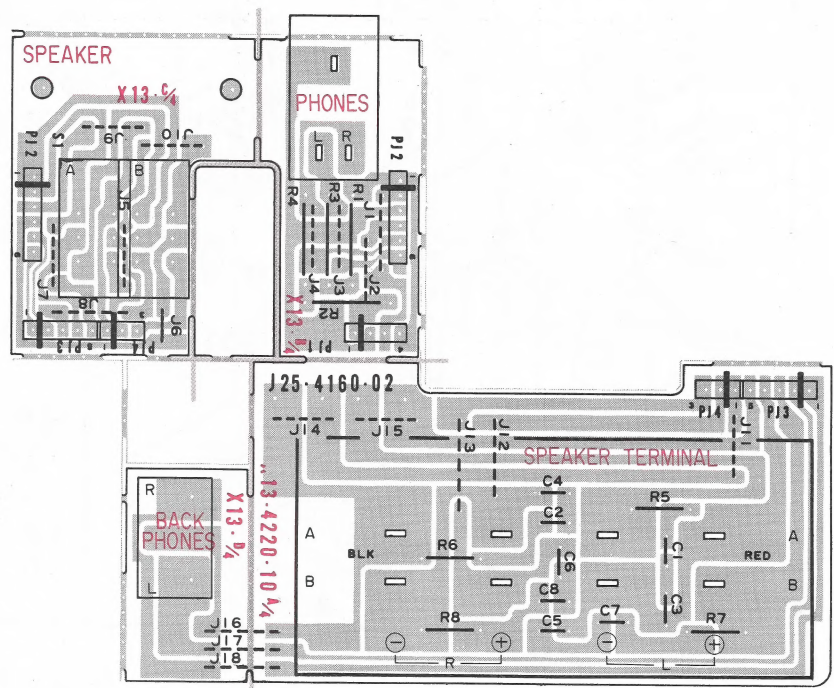


## PC BOARD

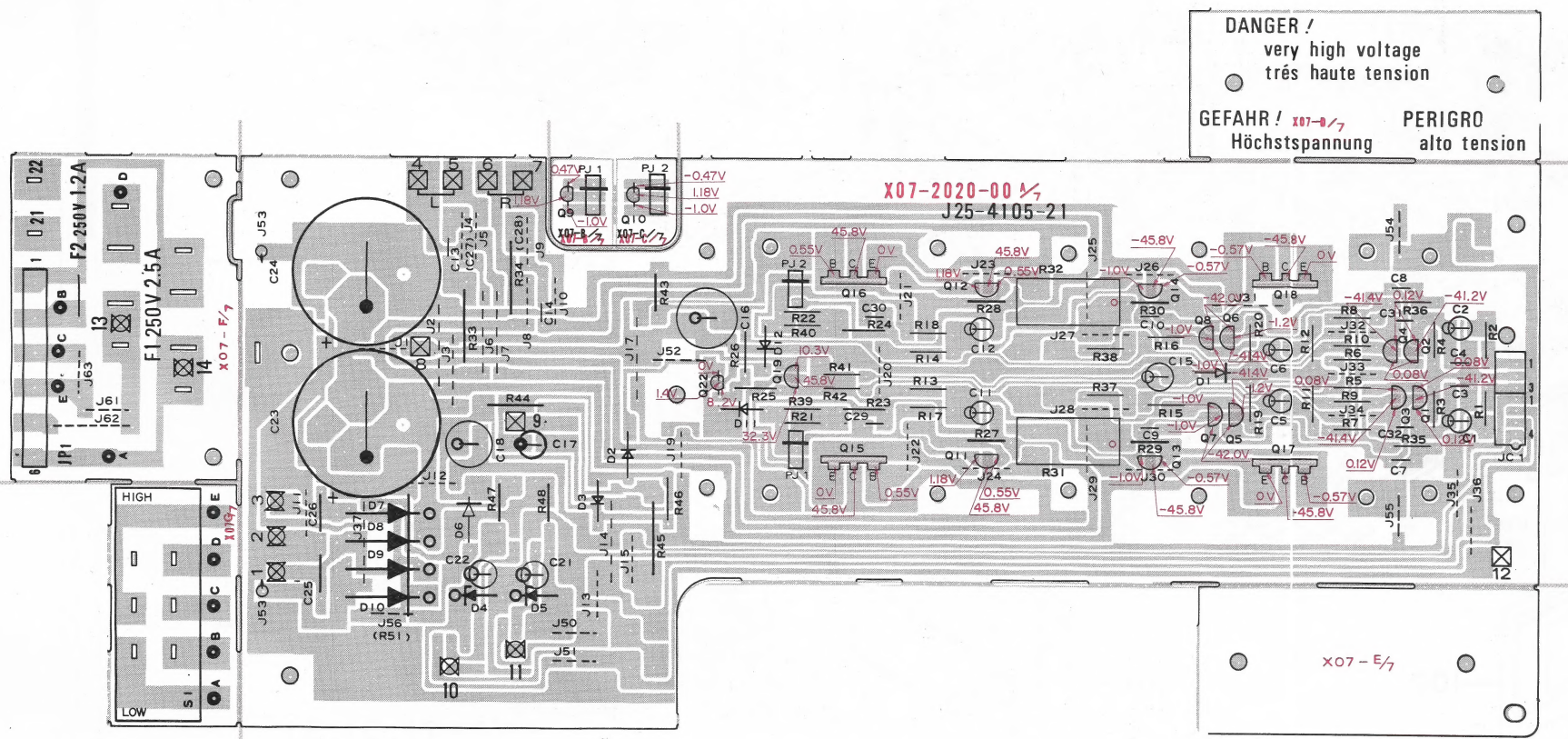
CONTROL PCB (X11-1870-10) Component side view



SUB PCB (X13-4220-10) Component side view



POWER AMP (X07-2020-11) (KA-51, KA-31) Component side view



In this model, there are separated pc boards which was originally one. These separated pc boards can't be shipped independently.

ex.	Part No. of pc board	Separated portion no.
	X09-1230-00	(A/3)
	X09-1230-00	(B/3)
	X09-1230-00	(C/3)

In the example shown above, separated portion can't be ordered independently. In case only A/3 was ordered, pc board ass'y of X09-1230-00, which all A/3, B/3, C/3 included, will be shipped.

Refer to the schematic diagram for the values of resistor and capacitors. The PC board drawing is viewing from the side easy to check.







## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
KA-31						
101	2A	*	A01-0471-03	METALLIC CABINET	KPUMH	
101	2A	*	A01-0471-03	METALLIC CABINET	UEXTE	
101	2A	*	A01-0632-03	METALLIC CABINET	M2	
102	3B	*	A20-3494-03	PANEL ASSY	KPUMH	
102	3B	*	A20-3494-03	PANEL ASSY	UEXE	
102	3B	*	A20-3502-03	PANEL ASSY	T	
102	3B	*	A20-3520-03	PANEL ASSY	M2	
-			B46-0092-03	WARRANTY CARD	K	
-			B46-0093-03	WARRANTY CARD	P	
-			B46-0094-03	WARRANTY CARD	UHE	
-			B46-0095-03	WARRANTY CARD	UHE	
-			B46-0096-03	WARRANTY CARD	X	
-			B46-0097-03	WARRANTY CARD	T	
-			B46-0098-03	WARRANTY CARD	E	
-			B50-4700-00	INSTRUCTION MANUAL (ENG)	K	
-			B50-4701-00	INSTRUCTION MANUAL (ENG)	PUMH	
-			B50-4701-00	INSTRUCTION MANUAL (ENG)	UEXM2	
-			B50-4702-00	INSTRUCTION MANUAL (FRE)	PMXE	
-			B50-4702-00	INSTRUCTION MANUAL (FRE)	M2	
-			B50-4703-00	INSTRUCTION MANUAL (SPA)	MM2	
-			B50-4704-00	INSTRUCTION MANUAL (ENG)	T	
-			B50-4705-00	INSTRUCTION MANUAL (4LI)	E	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	UMHUE	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	XM2	
△ C1			C91-0079-05	CERAMIC 0.01UF AC125V	KPTE	
△ 103	1D		E03-0061-05	AC OUTLET	KPUMH	
△ 103	1D		E03-0061-05	AC OUTLET	UEXM2	
△ 104	1D		E30-0181-05	AC POWER CORD	KP	
△ 104	1D		E30-0459-05	AC POWER CORD	E	
△ 104	1D		E30-0587-15	AC POWER CORD	T	
△ 104	1D		E30-0649-05	AC POWER CORD	X	
△ 104	1D		E30-0812-05	AC POWER CORD	UMHUE	
△ 104	1D		E30-0812-05	AC POWER CORD	M2	
105	3B		G01-0494-04	COMPRESSION SPRING (SELECTOR)		
-		*	H01-4747-04	ITEM CARTON CASE	KPUMH	
-		*	H01-4747-04	ITEM CARTON CASE	UEXE	
-		*	H01-4759-04	ITEM CARTON CASE	T	
-		*	H01-4775-04	ITEM CARTON CASE	M2	
-			H10-1637-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-1646-02	POLYSTYRENE FOAMED FIXTURE		
-			H20-0462-04	PROTECTION COVER		
-			H25-0078-04	PROTECTION BAG		
106	2C		J02-0109-05	FOOT 21X4.2		
107	3D		J02-0343-05	FOOT 20X10		
△ 108	1D		J42-0083-05	POWER CORD BUSHING	KPUMH	
△ 108	1D		J42-0083-05	POWER CORD BUSHING	UEETE	
△ 108	1D		J42-0083-05	POWER CORD BUSHING	M2	
△ 108	1D		J42-0085-05	POWER CORD BUSHING	X	
109	3B		K27-0909-04	KNOB LOUDNESS		
110	2B		K27-0968-04	KNOB SPEAKERS		

E: Scandinavia &amp; Europe H: Audio Club K: USA

P: Canada

△ indicates safety critical components.

S: South Africa

T: England

U: PX(Far East, Hawaii)

M2 : KA-31B

UE: AAFES(Europe)

X: Australia

M: Other Areas

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
111	3B		K29-0485-14	KN0B VOLUME		
112	2B		K29-1176-04	KN0B ASSY POWER		
113	3A		K29-1179-04	KN0B ASSY PHONO	KPUMH	
113	3A		K29-1179-04	KN0B ASSY PHONO	UEXTE	
113	3A	*	K29-1273-04	KN0B ASSY PHONO	M2	
114	3A		K29-1180-04	KN0B ASSY TUNER	KPUMH	
114	3A		K29-1180-04	KN0B ASSY TUNER	UEXTE	
114	3A	*	K29-1274-04	KN0B ASSY TUNER	M2	
115	3A		K29-1182-04	KN0B ASSY TAPE B	KPUMH	
115	3A		K29-1182-04	KN0B ASSY TAPE B	UEXTE	
115	3A	*	K29-1276-04	KN0B ASSY TAPE B	M2	
116	3B		K29-1186-04	KN0B BALANCE		
116	3B	*	K29-1272-04	KN0B BALANCE	M2	
117	3A		K29-1266-04	KN0B ASSY TONE (ON/OFF)		
118	3A		K29-1267-04	KN0B ASSY MUTING		
119	3A		K29-1268-04	KN0B TONE	KPUMH	
119	3A		K29-1268-04	KN0B TONE	UEXTE	
119	3A	*	K29-1271-04	KN0B TONE	M2	
120	3A	*	K29-1275-04	KN0B ASSY TAPE A	M2	
120	3A		K29-1285-04	KN0B ASSY TAPE A	KPUMH	
120	3A		K29-1285-04	KN0B ASSY TAPE A	UEXTE	
△ 121	1A	*	L01-2891-05	POWER TRANSFORMER	KP	
△ 121	1A	*	L01-2896-05	POWER TRANSFORMER	UMHUE	
△ 121	1A	*	L01-2896-05	POWER TRANSFORMER	XTEM2	
122	2D		N08-0128-35	BINDING POST (GND)		
123	2A		N09-0377-05	TAPTITE SCREW (CASE)	KPUMH	
123	2A		N09-0377-05	TAPTITE SCREW (CASE)	UEXTE	
123	2A		N89-3008-45	BINDING TAPTITE SCREW (CASE)	M2	
△ S1	2B		S40-1067-05	PUSH SWITCH (POWER)		
124	1A	*	X07-2020-11	POWER AMPLIFIER UNIT	KP	
124	1A	*	X07-2020-21	POWER AMPLIFIER UNIT	UMHUE	
124	1A	*	X07-2020-21	POWER AMPLIFIER UNIT	XM2	
124	1A	*	X07-2020-51	POWER AMPLIFIER UNIT	T	
124	1A		X07-2022-71	POWER AMPLIFIER UNIT	E	
125	3C,2D	*	X11-1870-12	CONTROL UNIT	KPUMH	
125	3C,2D	*	X11-1870-12	CONTROL UNIT	UEXM2	
125	3C,2D	*	X11-1872-73	CONTROL UNIT	TE	
126	2B,2D	*	X13-4220-11	SUB-CIRCUIT UNIT	KPUMH	
126	2B,2D	*	X13-4220-11	SUB-CIRCUIT UNIT	UEXM2	
126	2B,2D	*	X13-4222-72	SUB-CIRCUIT UNIT	TE	
KA-71						
101	2A	*	A01-0498-03	METALLIC CABINET		
102	3B	*	A20-3492-03	PANEL ASSY	KPUMH	
102	3B	*	A20-3492-03	PANEL ASSY	UEXE	
102	3B	*	A20-3498-03	PANEL ASSY	T	
-			B46-0092-03	WARRANTY CARD	K	
-			B46-0093-03	WARRANTY CARD	P	
-			B46-0094-03	WARRANTY CARD	UHUE	
-			B46-0095-03	WARRANTY CARD	UHUE	
-			B46-0096-03	WARRANTY CARD.	X	
-			B46-0097-03	WARRANTY CARD	T	
-			B46-0098-03	WARRANTY CARD	E	

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M2 : KA-31B

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
--		*	B50-4700-00	INSTRUCTION MANUAL (ENG)	K	
--		*	B50-4701-00	INSTRUCTION MANUAL (ENG)	PUMH	
--		*	B50-4701-00	INSTRUCTION MANUAL (ENG)	UEX	
--		*	B50-4702-00	INSTRUCTION MANUAL (FRE)	PMXE	
--		*	B50-4703-00	INSTRUCTION MANUAL (SPA)	M	
--		*	B50-4704-00	INSTRUCTION MANUAL (ENG)	T	
--		*	B50-4705-00	INSTRUCTION MANUAL (4LI)	E	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	UMHUE	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	X	
△ C1			C91-0079-05	CERAMIC 0.01UF AC125V	KPTE	
△ 103	1D	*	E03-0061-05	AC OUTLET	KPUMH	
△ 103	1D	*	E03-0061-05	AC OUTLET	UEX	
△ 104	1D		E30-0181-05	AC POWER CORD	K	
△ 104	1D		E30-0459-05	AC POWER CORD	E	
△ 104	1D		E30-0587-15	AC POWER CORD	T	
△ 104	1D		E30-0649-05	AC POWER CORD	X	
△ 104	1D		E30-0780-05	AC POWER CORD	P	
△ 104	1D		E30-0812-05	AC POWER CORD	UMHUE	
105	3B		G01-0494-04	COMPRESSION SPRING(SELECTOR)		
--		*	H01-4746-04	ITEM CARTON CASE	KPUMH	
--		*	H01-4746-04	ITEM CARTON CASE	UEXE	
--		*	H01-4758-04	ITEM CARTON CASE	T	
--		*	H10-1637-02	POLYSTYRENE FOAMED FIXTURE		
--		*	H10-1646-02	POLYSTYRENE FOAMED FIXTURE		
--			H20-0462-04	PROTECTION COVER		
--			H25-0078-04	PROTECTION BAG		
106	2C		J02-0109-05	FOOT 21X4.2		
107	3D		J02-0343-05	FOOT 20X10		
108	1D		J42-0083-05	POWER CORD BUSHING	KPUMH	
108	1D		J42-0083-05	POWER CORD BUSHING	UEETE	
108	1D		J42-0085-05	POWER CORD BUSHING	X	
109	3B	*	K27-0909-04	KNOB (BUTTON) MODE,LOUD,SUB		
110	2B	*	K27-0968-04	KNOB (BUTTON) SPEAKER		
111	3B		K29-0485-14	KNOB VOLUME		
112	2B		K29-1176-04	KNOB ASSY POWER		
113	3A	*	K29-1179-04	KNOB ASSY PHONE		
114	3A	*	K29-1180-04	KNOB ASSY TUNER		
115	3A	*	K29-1182-04	KNOB ASSY TAPE B		
116	3B	*	K29-1186-04	KNOB BALANCE		
117	3A	*	K29-1266-04	KNOB ASSY TONE(ON/OFF)		
118	3A	*	K29-1267-04	KNOB ASSY MUTING		
119	3A	*	K29-1268-04	KNOB TONE		
120	3A	*	K29-1285-04	KNOB ASSY TAPE A		
△ 121	1C	*	L01-3071-05	POWER TRANSFORMER	KP	
△ 121	1C	*	L01-3076-05	POWER TRANSFORMER	UMHUE	
△ 121	1C	*	L01-3076-05	POWER TRANSFORMER	XTE	
122	2D		N08-0128-35	BINDING POST (GND)		
123	2A		N09-0377-05	TAPTITE SCREW (CASE)		
S1	2B	*	S40-1067-05	PUSH SWITCH (POWER TYPE)		
△ S2	1D		S31-2001-05	SLIDE SWITCH (4-8 SW)	UMHUE	
△ S2	1D		S31-2001-05	SLIDE SWITCH (4-8 SW)	XTE	

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△ S2	1D		S31-2068-05	SLIDE SWITCH (4-8 SW)	KP	
124	1C	*	X07-2010-11	POWER AMPLIFIER UNIT	KP	
124	1C	*	X07-2010-21	POWER AMPLIFIER UNIT	UMHUE	
124	1C	*	X07-2010-21	POWER AMPLIFIER UNIT	X	
124	1C	*	X07-2010-51	POWER AMPLIFIER UNIT	T	
124	1C	*	X07-2012-71	POWER AMPLIFIER UNIT	E	
125	3C,2D	*	X11-1870-10	CONTROL UNIT	KPUMH	
125	3C,2D	*	X11-1870-10	CONTROL UNIT	UEXT	
125	3C,2D	*	X11-1872-71	CONTROL UNIT	E	
126	2B,2D	*	X13-4220-10	SUB-CIRCUIT UNIT	KPUMH	
126	2B,2D	*	X13-4220-10	SUB-CIRCUIT UNIT	UEX	
126	2B,2D	*	X13-4222-71	SUB-CIRCUIT UNIT	TE	
KA-51						
101	2A		A01-0470-03	METALLIC CABINET	KPUMH	
101	2A		A01-0470-03	METALLIC CABINET	UEXT	
101	2A		A01-0632-03	METALLIC CABINET	K2M2	
102	3B	*	A20-3496-03	PANEL ASSY	KPUMH	
102	3B	*	A20-3496-03	PANEL ASSY	UEXE	
102	3B	*	A20-3500-03	PANEL ASSY	T	
102	3B	*	A20-3522-03	PANEL ASSY	K2M2	
-			B46-0092-03	WARRANTY CARD	KK2	
-			B46-0093-03	WARRANTY CARD	P	
-			B46-0094-03	WARRANTY CARD	UHUE	
-			B46-0095-03	WARRANTY CARD	UHUE	
-			B46-0096-03	WARRANTY CARD	X	
-			B46-0097-03	WARRANTY CARD	T	
-			B46-0098-03	WARRANTY CARD	E	
-			B50-4700-00	INSTRUCTION MANUAL (ENG)	KK2	
-			B50-4701-00	INSTRUCTION MANUAL (ENG)	PUMH	
-			B50-4701-00	INSTRUCTION MANUAL (ENG)	UEX	
-			B50-4701-00	INSTRUCTION MANUAL (ENG)	M2	
-			B50-4702-00	INSTRUCTION MANUAL (FRE)	PMXE	
-			B50-4702-00	INSTRUCTION MANUAL (FRE)	M2	
-			B50-4703-00	INSTRUCTION MANUAL (SPA)	MM2	
-			B50-4704-00	INSTRUCTION MANUAL (ENG)	T	
-			B50-4705-00	INSTRUCTION MANUAL (4LI)	E	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	UMHUE	
△ C1			C91-0023-05	CERAMIC 0.01UF AC250V	X	
△ C1			C91-0079-05	CERAMIC 0.01UF AC125V	KPTE	
△ C1			C91-0079-05	CERAMIC 0.01UF AC125V	K2	
△ 103	1D		E03-0061-05	AC OUTLET	KPUMH	
△ 103	1D		E03-0061-05	AC OUTLET	UEX	
△ 103	1D		E03-0061-05	AC OUTLET	K2M2	
△ 104	1D		E30-0181-05	AC POWER CORD	KK2	
△ 104	1D		E30-0459-05	AC POWER CORD	E	
△ 104	1D		E30-0587-15	AC POWER CORD	T	
△ 104	1D		E30-0649-05	AC POWER CORD	X	
△ 104	1D		E30-0780-05	AC POWER CORD	P	
△ 104	1D		E30-0812-05	AC POWER CORD	UMHUE	
△ 104	1D		E30-0812-05	AC POWER CORD	M2	
105	3B		G01-0494-04	COMPRESSION SPRING (SELECTOR)		

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-		*	H01-4748-04	ITEM CARTON CASE	KPUMH	
-		*	H01-4748-04	ITEM CARTON CASE	UEXE	
-		*	H01-4761-04	ITEM CARTON CASE	T	
-		*	H01-4776-04	ITEM CARTON CASE	K2M2	
-			H10-1637-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-1646-02	POLYSTYRENE FOAMED FIXTURE		
-			H20-0462-04	PROTECTION COVER		
-			H25-0078-04	PROTECTION BAG		
106	2C		J02-0109-05	FOOT 21X4.2		
107	3D		J02-0343-05	FOOT 20X10		
108	1D		J42-0083-05	POWER CORD BUSHING	KPUMH	
108	1D		J42-0083-05	POWER CORD BUSHING	UEITE	
108	1D		J42-0083-05	POWER CORD BUSHING	K2M2	
108	1D		J42-0085-05	POWER CORD BUSHING	X	
109	3B		K27-0909-04	KN0B (BUTTON) LOUD, SUB		
110	2B		K27-0968-04	KN0B (BUTTON) SPEAKERS		
111	3B		K29-0485-14	KN0B VOLUME		
112	2B		K29-1176-04	KN0B ASSY POWER		
113	3A		K29-1179-04	KN0B ASSY PHONO	KPUMH	
113	3A		K29-1179-04	KN0B ASSY PHONO	UEXTE	
113	3A		K29-1273-04	KN0B ASSY PHONO	K2M2	
114	3A		K29-1180-04	KN0B ASSY TUNER	KPUMH	
114	3A		K29-1180-04	KN0B ASSY TUNER	UEXTE	
114	3A		K29-1274-04	KN0B ASSY TUNER	K2M2	
115	3A		K29-1182-04	KN0B ASSY TAPE B	KPUMH	
115	3A		K29-1182-04	KN0B ASSY TAPE B	UEXTE	
115	3A		K29-1276-04	KN0B ASSY TAPE B	K2M2	
116	3B		K29-1186-04	KN0B BALANCE	KPUMH	
116	3B		K29-1186-04	KN0B BALANCE	UEXTE	
116	3B		K29-1271-04	KN0B BALANCE	K2M2	
117	3A		K29-1266-04	KN0B ASSY TONE ON/OFF		
118	3A		K29-1267-04	KN0B ASSY MUTING		
119	3A		K29-1268-04	KN0B TONE	KPUMH	
119	3A		K29-1268-04	KN0B TONE	UEXTE	
119	3A		K29-1272-04	KN0B TONE	K2M2	
120	3A		K29-1275-04	KN0B ASSY TAPE A	K2M2	
120	3A		K29-1285-04	KN0B ASSY TAPE A	KPUMH	
120	3A		K29-1285-04	KN0B ASSY TAPE A	UEXTE	
△ 121	1B	*	LD1-3091-05	POWER TRANSFORMER	KPK2	
△ 121	1B	*	LD1-3096-05	POWER TRANSFORMER	UMHUE	
△ 121	1B	*	LD1-3096-05	POWER TRANSFORMER	XTEM2	
122	2D		N08-0128-35	BINDING POST (GND)		
123	2A		N09-0377-05	TAPTITE SCREW (CASE)	KPUMH	
123	2A		N09-0377-05	TAPTITE SCREW (CASE)	UEXTE	
123	2A		N89-3008-45	BINDING TAPTITE SCREW (CASE)	K2M2	
△ S1	2B		S40-1067-05	PUSH SWITCH (POWER)		
124	2A	*	X07-2020-12	POWER AMPLIFIER UNIT	KPK2	
124	2A	*	X07-2020-22	POWER AMPLIFIER UNIT	UMHUE	
124	2A	*	X07-2020-22	POWER AMPLIFIER UNIT	XM2	
124	2A	*	X07-2020-52	POWER AMPLIFIER UNIT	T	
124	2A	*	X07-2022-72	POWER AMPLIFIER UNIT	E	
125	3C, 2D	*	X11-1870-11	CONTROL UNIT	KPUMH	

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125	3C,2D	*	X11-1870-11	CONTROL UNIT	UEXK2	
125	3C,2D	*	X11-1870-11	CONTROL UNIT	M2	
125	3C,2D	*	X11-1872-72	CONTROL UNIT	TE	
126	2B,2D		X13-4220-11	SUB-CIRCUIT UNIT	KPUMH	
126	2B,2D		X13-4220-11	SUB-CIRCUIT UNIT	UEX	
126	2B,2D		X13-4220-11	SUB-CIRCUIT UNIT	K2M2	
126	2B,2D		X13-4222-72	SUB-CIRCUIT UNIT	TE	
POWER (X07-2010-11)						
C3 ,4			CC45FSL1H151J	CERAMIC 150PF J		
C7 ,8			CC45FSL1H101J	CERAMIC 100PF J		
C9 ,10			CC45FSL1H180J	CERAMIC 18PF J		
C11 ,12			CC45FSL1H330J	CERAMIC 33PF J		
C13 ,14			CQ93FM1H104K	MYLAR 0.10UF K	TE	
C13 ,14			CQ93FM1H473K	MYLAR 0.047UF K	KPUMH	
C13 ,14			CQ93FM1H473K	MYLAR 0.047UF K	UEX	
C15 ,16		*	C90-1231-05	ELECTRO 7500UF 56WV		
C17 ,18		*	C91-0156-05	CERAMIC 0.01UF 150V		
C29 ,30			CQ93FM1H103K	MYLAR 0.01UF K		
C31 ,32			CQ93FM1H104K	MYLAR 0.10UF K	TE	
△ F1			F05-2528-05	FUSE (SEMKO) (F2.5A)	T	
△ F1			F05-5022-05	FUSE (5A)	UMHUE	
△ F1			F05-5022-05	FUSE (5A)	X	
△ F1			F05-5024-05	FUSE (SEMKO) (F5A)	E	
△ F1			F06-5022-05	FUSE (UL) (5A)	KP	
△ F2			F05-2521-05	FUSE (2.5A)	UMHUE	
△ F2			F05-2521-05	FUSE (2.5A)	X	
△ F2			F05-2528-05	FUSE (SEMKO) (F2.5A)	E	
-			J13-0055-05	FUSE CLIP		
L1 ,2			L39-0085-05	PHASE-COMPENSATION COIL		
L3 ,4			L40-1021-11	SMALL FIXED INDUCTOR (1MH)		
201	1C		N09-0333-05	TAPPING SCREW		
R15 ,16			RD14GB2E271J	FL-PROOF RD 270 J 2E		
R17 -20			RD14GB2E100J	FL-PROOF RD 10 J 2E		
R21 -24			RD14GB2E181J	FL-PROOF RD 180 J 2E		
R27 ,28		*	RS14GB3A103JFU	FL-PROOF RS 10K J 3A		
R31 -34			RD14GB2E331J	FL-PROOF RD 330 J 2E		
R35 ,36			R90-0187-05	MULTI-COMP 0.22X2 K 3H		
R37 ,38			RS14GB3D100JFU	FL-PROOF RS 10 J 3D		
R41 ,42			RD14GB2E2R2J	FL-PROOF RD 2.2 J 2E		
R43 ,44			RD14GB2E332J	FL-PROOF RD 3.3K J 2E		
R45 ,46		*	RS14GB3A332JFU	FL-PROOF RS 3.3K J 3A		
R47 ,48			RD14GB2E560J	FL-PROOF RD 56 J 2E		
R53 ,54		*	RS14GB3A121JFU	FL-PROOF RS 120 J 3A		
R56		*	RS14GB3A182JFU	FL-PROOF RS 1.8K J 3A		
VR1 ,2		*	R12-0079-05	TRIMMING POT. 100 BIAS		
RL1		*	S51-2060-05	MAGNETIC RELAY		
S1	2D		S31-2050-05	SLIDE SWITCH (VOLTAGE SELECT)	UMHUE	
S1	2D		S31-2050-05	SLIDE SWITCH (VOLTAGE SELECT)	XE	
D1 ,2			1S1555	DIODE		
D1 ,2			1S2076	DIODE		
D1 ,2		*	1S2473	DIODE		

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D3 ,4			STV-4H(W)	VARISTOR		
D5 ,6		*	WZ-167	ZENER DIODE		
Δ D7 -10			GP25DL	DIODE		
Δ D7 -10			U05C(S)	DIODE		
Δ D11 -13			W06B	DIODE		
IC1			UPC1237H	IC		
Q1 -6			2SA992(F,E)	TRANSISTOR		
Q7 -10			2SC1845(F,E)	TRANSISTOR		
Δ Q11 ,12			2SA1110(Q,R)	TRANSISTOR		
Δ Q13 ,14			2SC2590(Q,R)	TRANSISTOR		
Δ Q15 ,16		*	2SA1215	TRANSISTOR		
Δ Q17 ,18		*	2SC2921	TRANSISTOR		
Δ Q19			2SC1685(R,S)	TRANSISTOR		
Δ Q19			2SC945(A)(Q,P)	TRANSISTOR		
Δ Q20 ,21			2SA1127NC(R,S)	TRANSISTOR		
Δ Q20 ,21			2SA733(A)(Q,P)	TRANSISTOR		
Q22			2SC1685(R,S)	TRANSISTOR		
Q22			2SC945(A)(Q,P)	TRANSISTOR		
POWER (X07-2020-11)						
C3 ,4			CC45FSL1H221J	CERAMIC 220PF J		
C7 ,8			CC45FSL1H331J	CERAMIC 330PF J		
C9 ,10			CC45FSL1H220J	CERAMIC 22PF J		
C13 ,14			CQ93FM1H104K	MYLAR 0.10UF K	TE	
C13 ,14			CQ93FM1H473K	MYLAR 0.047UF K	KPUMH	
C13 ,14			CQ93FM1H473K	MYLAR 0.047UF K	UEX	
C13 ,14			CQ93FM1H473K	MYLAR 0.047UF K	K2M2	51
C23 ,24			C90-0366-05	ELECTRO 6800UF 50WV		31
C23 ,24			C90-0472-05	ELECTRO 4700UF 35WV		
C25 ,26			CK45E2H103P	CERAMIC 0.01UF P		
C27 ,28			CQ93FM1H104K	MYLAR 0.10UF K	TE	
C29 ,30			CQ93FM1H123K	MYLAR 0.012UF K		
C31 ,32		*	CC45FSL1H101J	CERAMIC 100PF J	TE	
Δ F1			F05-2521-05	FUSE (2.5A)	UMHUE	31
Δ F1			F05-2521-05	FUSE (2.5A)	XM2	31
Δ F1			F05-2528-05	FUSE (SEMKO) (F 2.5A)	E	31
Δ F1			F05-2529-05	FUSE (UL) (2.5A)	KP	31
Δ F1			F05-4022-05	FUSE (4A)	UMHUE	51
Δ F1			F05-4022-05	FUSE (4A)	XM2	51
Δ F1			F05-4024-05	FUSE (SEMKO) (F4A)	E	51
Δ F1			F06-4024-05	FUSE (UL) (4A)	KPK2	51
Δ F2			F05-1224-05	FUSE (1.2A)	UMHUE	31
Δ F2			F05-1224-05	FUSE (1.2A)	XM2	31
Δ F2			F05-1227-05	FUSE (SEMKO) (F 1.25A)	TE	31
Δ F2			F05-2023-05	FUSE (2A)	UMHUE	51
Δ F2			F05-2023-05	FUSE (2A)	XM2	51
Δ F2			F05-2029-05	FUSE (SEMKO) (F2A)	TE	51
-			J13-0055-05	FUSE CLIP		
201	1B		N09-0333-05	TAPPING SCREW		51
201	1A		N30-3008-46	PAN HEAD SCREW		31
R15 ,16			RD14GB2E181J	FL-PROOF RD 180 J 2E	KPTE	
R15 ,16			RD14GB2E181J	FL-PROOF RD 180 J 2E	K2	
R19 ,20			RD14GB2E271J	FL-PROOF RD 270 J 2E	KPTE	
R19 ,20			RD14GB2E271J	FL-PROOF RD 270 J 2E	K2	

E: Scandinavia &amp; Europe H: Audio Club K: USA

S: South Africa

T: England

U: PX(Far East, Hawaii)

P: Canada

M2, K2 : B type

UE: AAFES(Europe)

X: Australia

M: Other Areas

51 : KA-51/51B

31 : KA-31/31B

Δ indicates safety critical components.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
R26			RD14GB2E303J	FL-PROOF RD 30K J 2E		51
R27 -30			RD14GB2E331J	FL-PROOF RD 330 J 2E		
R31 ,32			R90-0138-05	MULTIPLE-COMP 0.22X2 K 3F		
R33 ,34			RS14GB3D100JFU	FL-PROOF RS 10 J 3D		
R39 ,40			RD14GB2E303J	FL-PROOF RD 30K J 2E		51
Δ R43			RD14GB2E820J	FL-PROOF RD 82 J 2E		
R44		*	RS14GB3A101JFU	FL-PROOF RS 100 J 3A		31
R44			RS14GB3D221JFU	FL-PROOF RS 220 J 3D		51
R45			RS14GB3D221JFU	FL-PROOF RS 220 J 3D		
R47 ,48		*	RD14GB2E222JMA	FL-PROOF RD 2.2K J 2E		
Δ R51			RD14GB2E4R7J	FL-PROOF RD 4.7 J 2E	KPK2	
S1	2D		S31-2050-05	SLIDE SWITCH (VOLTAGE SELECT)	UMHUE	
S1	2D		S31-2050-05	SLIDE SWITCH (VOLTAGE SELECT)	XEM2	
D1 -3			1S2076A	DIODE		
D4 ,5			WZ-167	ZENER DIODE		
D6			W06B	DIODE		
Δ D7 -10			GP20DL	DIODE		31
Δ D7 -10			GP25DL	DIODE		51
Δ D7 -10			S2V20*1	DIODE		31
Δ D7 -10			U05C(S)	DIODE		51
D11 ,12			1S2076A	DIODE		
Q1 -4			2SA992(F,E)	TRANSISTOR		
Q5 -8			2SC1845(F,E)	TRANSISTOR		
Q9 ,10			2SC945(A)(Q)	TRANSISTOR		
Δ Q11 ,12			2SC2003(L,K)	TRANSISTOR		31
Δ Q11 ,12			2SC2590(R,S)	TRANSISTOR		51
Δ Q13 ,14			2SA1110(R,S)	TRANSISTOR		51
Δ Q13 ,14			2SA954(L,K)	TRANSISTOR		31
Δ Q15 ,16			2SC2577(Q,Y)	TRANSISTOR		31
Δ Q15 ,16		*	2SC2581(Q,Y)	TRANSISTOR		51
Δ Q17 ,18			2SA1102(Q,Y)	TRANSISTOR		31
Δ Q17 ,18		*	2SA1106(Q,Y)	TRANSISTOR		51
Δ Q19			2SC2320(E,F)	TRANSISTOR		
Δ Q19			2SC945(A)(Q,P)	TRANSISTOR		
Q22			2SC2320(E,F)	TRANSISTOR		
Q22			2SC945(A)(Q,P)	TRANSISTOR		
CONTROL (X11-1870-10)						
D2			B30-0287-05	LED POWER		
D3 -5			B30-0449-05	LED PHONO, TUNER, TAPE A		
D6		*	B30-0486-05	LED TAPE B		
D7		*	B30-0477-05	LED TONE		
D8		*	B30-0475-05	LED MUTING		
C1 ,2			CC45FSL1H101J	CERAMIC 100PF J	KPUMH	
C1 ,2			CC45FSL1H101J	CERAMIC 100PF J	UEXT	
C1 ,2			CC45FSL1H221J	CERAMIC 220PF J	E	
C7 ,8			CQ93FM1H123J	MYLAR 0.012UF J		
C9 ,10			CQ93FM1H332J	MYLAR 0.0033UF J		
C13 ,14			CK45FB1H222K	CERAMIC 2200PF K	E	
C13 ,14			CK45FB1H561K	CERAMIC 560PF K	KPUMH	
C13 ,14			CK45FB1H561K	CERAMIC 560PF K	UEXT	
C17 ,18			CQ93FM1H333K	MYLAR 0.033UF K		
C21 ,22			CK45FB1H471K	CERAMIC 470P K		
C23 ,24			CK45FB1H561K	CERAMIC 560PF K		

E: Scandinavia &amp; Europe H: Audio Club K: USA

S: South Africa

T: England

U: PX(Far East, Hawaii)

P: Canada

UE: AAFES(Europe)

X: Australia

M: Other Areas

51 : KA-51

Δ indicates safety critical components.

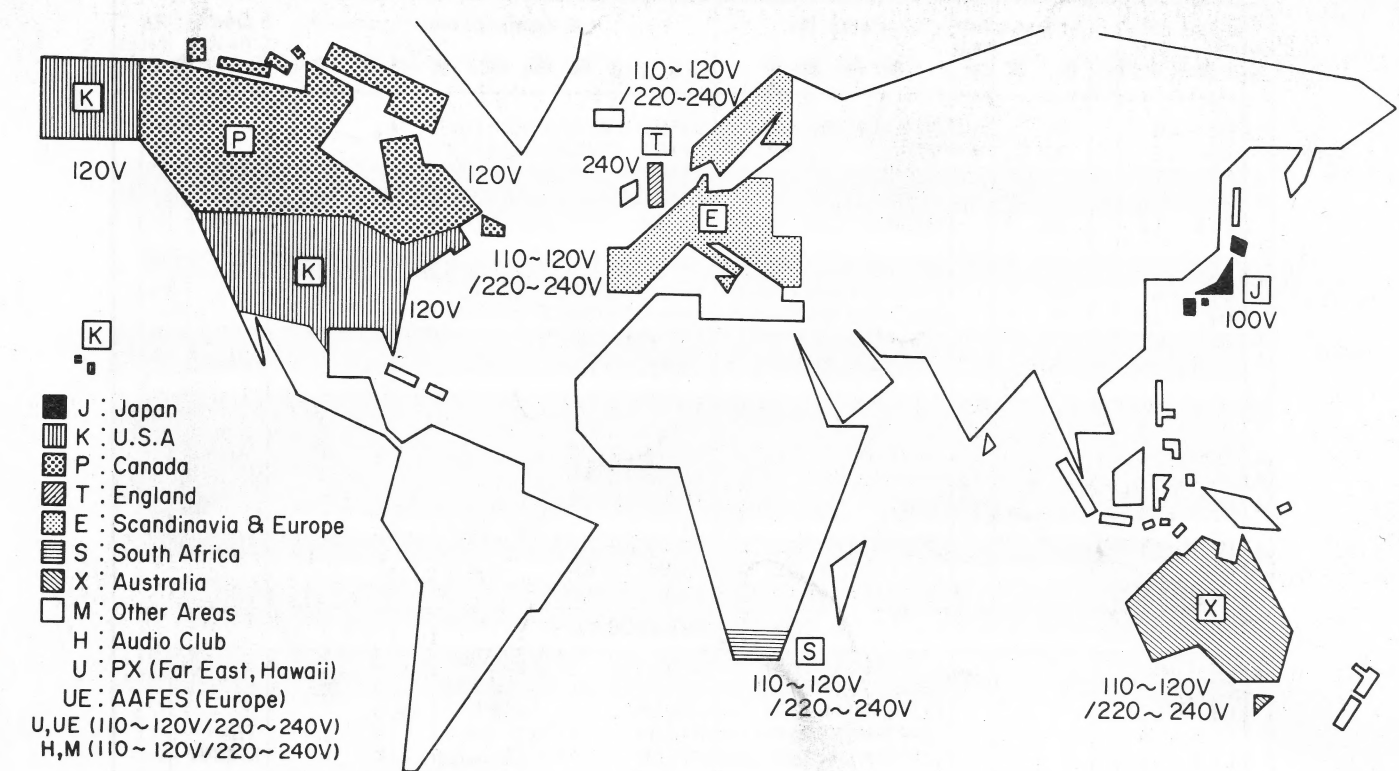


PARTS LIST

\* New Parts  
Parts without **Parts No.** are not supplied.  
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C25 ,26 C35 -38 C39 ,40 C46 C51 -56			CC45FSL1H150J CQ93FM1H183K CK45FB1H102K CK45FF1H103Z CK45FB1H561K	CERAMIC 15PF J MYLAR 0.018UF K CERAMIC 0.001UF K CERAMIC 0.01UF Z CERAMIC 560PF K	E	
301	2D		E13-0622-05	PHONE JACK		
L1 ,2			L40-1021-11	SMALL FIXED INDUCTOR		
-			N29-0053-05	PUSH RIVET		
VR1 ,2 VR3 VR3 VR3 VR4	2B 3C 3C 3C 3C	* * * * *	RO6-3036-05 RO6-5107-05 RO6-5108-05 RO6-5108-05 RO5-5008-05	POTENTIOMETER 10K(B) TONE POTENTIOMETER 100K(B)X2 VOL POTENTIOMETER 100K(B)X2 VOL POTENTIOMETER 100K(B)X2 VOL POTENTIOMETER 200K(G) BALANCE		71 51 31
S1 S2 ,3 S4 -6 S5 ,6 S6	2D 3C 3B 3B 3B	*     	S42-4028-05 S40-4047-05 S40-2323-05 S40-2323-05 S40-2323-05	MULTIPLE PUSH SWITCH (INPUT) PUSH SWITCH (TONE,MUTING) PUSH SWITCH (MODE,LOUD,SUB) PUSH SWITCH (LOUD,SUB) PUSH SWITCH (SUB)		71 51 31
D1 D9 D9 IC1 IC2			BZ-090 1S2076 1S2076 AN6555F AN6555	ZENER DIODE DIODE DIODE IC IC		51 31
SUB (X13-4220-10)						
C1 -8 401 402 403	2B 2D 2D	  *	CQ93M1H102K E11-0111-05 E13-0216-05 E20-0819-05	MYLAR 0.001UF K PHONE JACK (PHONES) PHONE JACK (BACK PHONES) LOCK TERMINAL BOARD (SPEAKER)	TE	
R1 -4 R1 -4 R1 -4 R5 -8			RS14GB3A151J RS14GB3A151J RS14GB3A181J RD14GB2E331J	FL-PROOF RS 150 J 3A FL-PROOF RS 150 J 3A FL-PROOF RS 180 J 3A FL-PROOF RD 330 J 2E	TE	51 31 71
S1 S1 S1	2B 2B 2B	* * *	S42-2090-05 S42-2091-05 S42-2091-05	MULTIPLE PUSH SWITCH (SP) MULTIPLE PUSH SWITCH (SP) MULTIPLE PUSH SWITCH (SP)		71 51 31

WORLD MAP & AREA CODE



**Note:**  
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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UE: AAFES(Europe) X: Australia M: Other Areas